UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,313	10/01/2004	Rolf-Dieter Pavlik	2002P03971WOUS	4818

7590 11/07/2006		EXAMINER
Siemens Corporation		JARRETT, RYAN A
Intellectual Property Department		
170 Wood Avenue South		ART UNIT / PAPER NUMBER
Iselin, NJ 08830		2125

DATE MAILED: 11/07/2006

·Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/510,313	PAVLIK ET AL.
	Examiner	Art Unit	
	Ryan A. Jarrett	2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>23 August 2006</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>17,20 and 28-40</u> is/are pending in the application.

   4a) Of the above claim(s) <u>29-40</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>17,20 and 28</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☒ All b)☐ Some * c)☐ None of:

     1.☐ Certified copies of the priority documents have been received.

     2.☐ Certified copies of the priority documents have been received in Application No. _____.

     3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1.   Newly submitted claims 29-40 are directed to an invention that is independent or

distinct from the invention originally claimed for the following reasons:

Claim 29 does not share the same special technical feature(s) as that of claim 17

or 20.

Claims 30 and 37 do not share the same special technical feature(s) as that of

claim 28.

The determination regarding unity of invention is made without regard to whether

a group of inventions is claimed in separate claims or as alternatives within a single

claim. The basic criteria for unity of invention are the same, regardless of the manner in

which applicant chooses to draft a claim or claims.

Since applicant has received an action on the merits for the originally presented

invention, this invention has been constructively elected by original presentation for

prosecution on the merits. Accordingly, claims 29-40 are withdrawn from consideration

as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP §

821.03.

Priority

2.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which

papers have been placed of record in the file. This application is a 371 of

PCT/DE03/01007, filed 03/26/2003, which claims the benefit of German application no.

10214539.3, filed 04/02/2002.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 20 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by

Kuchlin et al., "HighRobot: Telerobotics in the Internet". Kuchlin et al. discloses:

28.   A production system comprising:

a computer operating system in a computer comprising a real-time reaction

capability (e.g., Section 2: "HIGHROBOT is a new parallel high performance controller, based

on standard hardware and software...The control unit uses an off-the-shelf SMP (Shared

Memory Multiprocessor) SPARCstation with the Solaris 2.x operating system including

POSIX.4 extensions.   HIGHROBOT uses POSIX.4 soft real-time features to control all

components in a robot cell");

a web server kernel (e.g., Fig. 3: "ObjectServer") **installed on the computer operating**

system for data communication with a network (e.g., Section 3.2-4: "We installed a Web-

Server, discussed in section 4, on the HIGHROBOT control making the system accessible via the

Internet"), **the web server kernel comprising a standardized interface for software extension**

modules (e.g., Section 2: "The control unit uses an off-the-shelf SMP (Shared Memory Multiprocessor) SPARCstation with the Solaris 2.x operating system including POSIX.4 extensions.", Section 4.2: "Our server integrates all objects that must be accessible from remote systems. Each object can be considered as a designated server in the common sense. The idea of the concept is to deliver a server architecture which makes the core of the general server independent of the properties of actual supported objects. This makes the general server very flexible and easy to extend with new server object functionality.", Section 4.2.2: "New body objects can be easily integrated in the general server.", Section 5: "The general server can be extended easily with new server functionality and results due to its highly reusable code design");

a first machine process control module (e.g., Fig. 3: "RobotBody") **installed on the web server kernel** (e.g., Fig. 3: "ObjectServer") **via the standardized extension interface** (e.g., Section 4.2.2: "New body objects can be easily integrated in the general server.");

the first machine process control module (e.g., Fig. 3: "RobotBody") **in data communication with a production machine** (e.g., Fig. 1: "Robot Arm", Fig. 3: "Robot") **for monitoring and controlling the machine** (e.g., Section 4.3: "The *RobotBody* instance finally reads out the parameters of the MoveLinear() command and invokes the MoveLinear() operation of the real *Robot* instance. The *Robot* instance processes the MoveLinear command.");

the machine process control module in data communication with the network via the web server kernel (e.g., Fig. 1, Section 3.2-4: "We installed a Web-Server, discussed in section 4, on the HIGHROBOT control making the system accessible via the Internet"); **and**

a client on the network comprising a user display and user input interface and a

communication interface to the network (e.g., Fig. 1: "Internet world-wide");

a command that after being issued causes a program code to be loaded into a

memory of the computer and started as a process (EN: *Apparatus claims must be structurally*

distinguishable from the prior art. This recitation does not limit the structure of the claimed

system. The computer of Kuchlin et al. is capable of performing this function. Moreover, this

functionality is inherent to the definition of a "computer".),

wherein the operating system has direct access to a resource of the computer (EN:

Apparatus claims must be structurally distinguishable from the prior art. This recitation does

not limit the structure of the claimed system. The operating system of Kuchlin et al. is capable of

performing this function. Moreover, this functionality is inherent to the definition of an

"operating system".),

wherein the process has no direct access to the resource (EN: *Apparatus claims must*

be structurally distinguishable from the prior art. This recitation does not limit the structure of

the claimed system.

e.g., Section 2: "the Solaris 2.x operating system including POSIX.4

extensions...HIGHROBOT uses POSIX.4 soft real-time features to control all components in a

robot cell.", EN: *However, since Kuchlin et al. does not disclose that "processes" have direct*

access to computer resources, it is implied that they don't. Moreover, since the operating system

of Kuchlin et al. controls "all" components or processes in a robot cell, then the components or

processes do not have direct access to computer resources, since the components or process are

controlled by the operating system.),

and wherein the process requests access to the resource via the operating system (EN: *Apparatus claims must be structurally distinguishable from the prior art. This recitation does not limit the structure of the claimed system.*

e.g., Section 2: "the Solaris 2.x operating system including POSIX.4 extensions...HIGHROBOT uses POSIX.4 soft real-time features to control all components in a robot cell.", EN: *However, since the operating system of Kuchlin et al. controls "all" components or processes in a robot cell, it is necessary for the components or processes to request access to resources via the operating system.*),

whereby a user of the user display and user input interface can monitor and control the production machine remotely via the network (e.g., Section 4.3: "Now, the remote application e.g. may invoke the operation MoveLinear (xPos, yPos, zPos) of the *RobotProxy* instance....Finally the destination parameters xPos, yPos and zPos of the linear robot arm movement are packed in the message. The message is then sent to the general server on the HIGHROBOT control...Finally, the *RobotProxy* object reads the return values and returns them to the client application.").

20. **The production machine according to Claim 28, wherein the Web server is connected via a communications network with a Web browser as operating and monitoring system** (e.g., Section 4.1: "Web Browser", Section 5: "The client is written in Java and therefore can be embedded in HTML-pages which are accessible world wide via the Internet").

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuchlin

et al. as applied to claim 28 above, and further in view of Rathjen et al. US

2004/0015383.

Kuchlin et al. does not appear to explicitly disclose that the Web server

comprises a connection to the Internet via a firewall.

Rathjen et al. discloses a system for remotely collecting, visualizing, and

modifying operating data of a production machine. The production machine includes a

Web server comprising a connection to the Internet via a firewall (e.g., [0053]).

It would have been obvious to one having ordinary skill in the art at the time the

invention was made to modify Kuchlin et al. with Rathjen et al. in order to prevent

unauthorized access to the Web server and production machine of Kuchlin et al., as

taught by Rathjen et al.

Response to Arguments

7.   Applicant's arguments, see pages 9-10, filed 08/23/2006 with respect to the

drawing objection, claim objections, specification objections, and 35 U.S.C. 112 1st

rejections have been fully considered and they are persuasive. Therefore, these

objections and rejections have been withdrawn in light of the arguments and amendments filed 08/23/2006.

8.   Applicant's arguments, see page 10, filed 08/23/2006 with respect to the 35 U.S.C. 102(b) rejection of claims 20 and 28 as being anticipated by Kuchlin et al. have been fully considered but they are not persuasive.

Applicant argues that Kuchlin et al. does not teach or suggest that the process has no direct access to "the resource". As a first point, as noted above, Examiner submits that such a recitation does not limit the structure of the claimed apparatus. Secondly, even if the recitation could be re-worded so as to have patentable weight, Examiner submits that Kuchlin et al. does teaches the feature, as detailed above.

Conclusion

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of
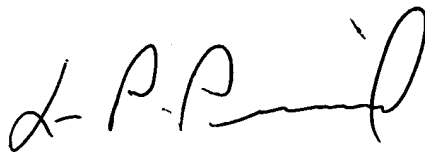
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (571) 272-3742. The examiner can normally be reached on 10:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner
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10/30/06
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